Abstract of the Disclosure

A transmission channel response calculation section calculates first to n-th transmission channel responses and stores the calculated first to n-th transmission channel responses in a memory section. A correlation calculation section obtains correlation values of the second to n-th transmission channel responses to the first transmission channel responses, respectively, and outputs the obtained correlation values to a transmission channel response synthesis section. The transmission channel response synthesis section gives weights according to the correlation values, weight-synthesizes the first to n-th transmission channel responses, and obtains a synthesized transmission channel response. An influence of noise on the synthesized transmission channel response is reduced. A distortion compensation section eliminates a distortion of the reception signal using the synthesized transmission channel response. Thus, it is made possible to calculate a transmission channel response without being influenced by the noise of a receiver and to ensure eliminating a transmission channel distortion.